

Kolloquium für Mechanik

Referee: **Dr. Stefan Kerkemeier**
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Date: Thursday, Dec. 13, 2018, 15:45h
Location: Bldg. 10.81, HS 62 (R 153)

Title: **Introduction to Nek5000**

Abstract

High-order methods have the potential to overcome the current limitations of standard CFD solvers. Nek5000 is a massively parallel spectral element code freely available under a BSD license. It features state-of-the-art scalable algorithms that are fast and efficient on platforms ranging from laptops to the world's fastest computers. Applications span a wide range of fields, including fluid flow, thermal convection, combustion and magnetohydrodynamics. The user community includes hundreds of scientists and engineers in academia, laboratories and industry.

This talk reviews the basic concepts of the code. A number of applications will be presented to demonstrate its capabilities. Recent developments are discussed including our roadmap to exascale architectures.

Alle Interessenten sind herzlich eingeladen.
Prof. Dr.-Ing. Bettina Frohnafel